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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/865,514	05/29/2001	Kazuma Okuda	010568	3133

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EXAMINER

ELKASSABGI, HEBA

ART UNIT PAPER NUMBER

2834

DATE MAILED: 11/14/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/865,514

Applicant(s)

OKUDA, KAZUMA

Examiner

Heba Elkassabgi

Art Unit

2834

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 July 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the claimed subject matter of Claim #1 of the "fan blades provided on a side wall of the crank pulley facing away from the engine side wall, said side wall extending radially outwards from said one end of the crankshaft to the peripheral wall of the crank pulley..." must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 4 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 4 is claiming a plurality of projections or channels; applicant needs to distinguish in the claim if it is either channels or projections that is formed on the outer periphery of the stator.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over (U.S. Patent 4288712) and further in view of Kusase et al. (J.P. Patent Application 4222436A).

Hagenlocher et al. discloses in Figure #1 an alternator between an annular space (AA) between an engine side wall (support structure i.e. engine)(E) and a crank pulley (drive pulley)(28) fixed to a crankshaft (machine shaft)(18). The air inlet passage (cover 13 is formed with ventilating openings 38) is formed between the engine side wall (support structure i.e. engine)(E) and an edge of the peripheral wall of the crank pulley (drive pulley)(28). The cooling fan blades (27) are provided on a side wall of the crank pulley (drive pulley)(28), with the crank pulley (drive pulley)(28) facing away from the engine side wall (support structure i.e. engine)(E). However, Hagenlocher et al. does not disclose the structure of the stator and rotor.

Kusase et al. illustrates in Figure #1 a stator (21) is supported on the engine housing (1) and a rotor (16) is supported on an inner face of a peripheral wall of the crank pulley (10), in order to simplify the structure and reduce the size and the weight by forming a recessed space in a pulley on the engine housing side and securing the rotor and stator.

It would have been obvious to one of ordinary skill in the art to modify Hagenlocher et al. with Kusase et al. in order to simplify the structure and reduce the size and weight of the stator and rotor.

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hagenlocher et al. (U.S. Patent 4288712) and further in view of Kusase et al. (J.P. Patent Application 4222436A) and Gritter et al. (U.S. Patent 4651066).

Hagenlocher et al. and Kusase et al. teach all of claim 2 except for the plurality of the stator core and coils wound around the cores and projecting in a circumferential direction. Kakinuma et al. Discloses in Figure #2 a stator (12) with stator cores (14) formed from a plurality of core plates with coils (2) and formed into a t-shape and projectingly provided from a distance apart from one another. However, Kakinuma et al. fails to show cores with coils wound around the cores and an air passages between the coils.

Gritter et al. Illustrates in Figure #5 a stator assembly in which the coils (110) are wound around each armature tooth (102) and are extrapolative in a circumferential direction with an air passage (A) between the coils (110a through 110f), in order to secure the stator.

It would have been obvious at the time to a person having ordinary skill in the art to modify Hagenlocher et al. and Kusase et al. with the air passage (A) of Kakinuma et al. that is between the coils to reduce weight and exhaust emission. In addition to adding the modification of Gritter et al. in order to secure the stator to the motor shaft.

Claim 3/1 and 4/1 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hagenlocher et al. (U.S. Patent 4288712) and further in view of Kusase et al. (J.P. Patent Application 4222436A) and Kamiyama (J.P. Patent application 360118036A).

Hagenlocher et al. and Kusase et al. teach all the limitations of Claim 3 except for the shield covering on the stator facing the air inlet passage and projections from the circumferential direction of the outer periphery of the stator. Kamiyama illustrates in Figure #1 a generator in which a guide fin (133) acting as a cover for the air gap (A) is projecting from the upper end of the stator coil (12) facing and air inlet passage (B) for effective cooling of the coils.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to add the modification of Kamiyama to Hagenlocher et al. and Kusase et al. in order to efficiently circulate the cooling air to cool the coils.

Claim 3/2 and 4/2 are rejected under 35 U.S.C. 103(a) as being unpatentable over (U.S. Patent 4288712) and further in view of Kusase et al. (J.P. Patent Application 4222436A) and Gritter et al. (U.S. Patent 4651066) and Kamiyama (J.P. Patent application 360118036A).

Hagenlocher et al., Kusase et al. and Gritter et al. teach all the limitations of Claim 3 except for the shield covering on the stator facing the air inlet passage and projections from the circumferential direction of the outer periphery of the stator. Kamiyama illustrates in Figure #1 a generator in which a guide fin (133) acting as a

cover for the air gap (A) is projecting from the upper end of the stator coil (12) facing and air inlet passage (B) for effective cooling of the coils.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to add the modification of Kamiyama to Hagenlocher et al. Kusase et al. and Gritter et al., in order to efficiently circulate the cooling air to cool the coils.

Response to Arguments

Applicant's arguments with respect to claim 1-4 have been considered but are moot in view of the new ground(s) of rejection.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., prevent of foreign matter) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Heba Elkassabgi whose telephone number is (703) 305-2723. The examiner can normally be reached on M-Th (6:30-3:30), and every other Friday.


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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor Ramirez can be reached on (703) 308-1371. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-3431 for regular communications and (703) 305-3432 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1782.

HYE
November 6, 2002



NESTOR RAMIREZ
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